

10205.031
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: : Art Unit:
Domer et al. : Examiner:
Serial No.: : Date: January 25, 2002
Filed: January 25, 2002 :
For: Voice Activity Detector for Telephone



#0
DEBIA
9-16-00

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING
DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST
CLASS MAIL IN AN ENVELOPE ADDRESSED TO:
COMMISSIONER OF PATENTS AND TRADEMARKS;
BOX Patent Application
WASHINGTON, D.C. 20231, ON: JAN 25, 2002

Date of Deposit

Paul F. Wille

Signature

1-25-02

Date

DISCLOSURE STATEMENT UNDER RULE 56

Honorable Commissioner of Patents and Trademarks,
Washington, D.C. 20231

SIR:

It is respectfully requested that the art listed below be considered in the examination of the subject application and made of record therein. A copy of the art listed below is enclosed.

4,610,023 discloses (FIG. 5(A)) a speech detection circuit
September 2, 1986 that relies upon an input signal exceeding a first
Noso et al. threshold (1000-1) or a second threshold
(1000-2) for predetermined times and
producing square waves (FIGS. 5(B), 5(C))
representative of those times.

4,720,862	discloses (FIG. 3) detecting speech by
January 19, 1988	comparing calculated normalized residual power
Nakata et al.	with two thresholds α_1 and α_2 ;
4,879,745	discloses (FIG. 2) a control circuit that compares
Arbel	signal power, noise level, and echo in the
November 7, 1989	microphone and line input for selecting one or
	the other;
4,976,287	discloses (FIG. 2) a circuit for comparing the
Reesor et al.	peak amplitude and noise level in the
January 3, 1989	microphone and line input and selecting one or
	the other;
5,418,848	discloses (FIG. 2) an evaluation circuit that
..	includes counter 11 that counts up during
Armbrüster	periods of double talk and down during periods
May 23, 1995	without double talk and coupling a non-linear
	filter into the line out when the count reaches a
	predetermined number;
5,598,466	discloses (FIGS. 7, 11, 12) a plurality of
..	calculations that are performed to detect
Graumann	speech;
January 28, 1997	
5,692,042	discloses (FIG. 1) hysteresis (154) in a
Sacca	transmit/receive evaluation circuit;
November 25, 1997	

5,764,753	discloses (FIG. 3) an utterance detector including
McCaslin et al.	counter 120 controlled by power estimate circuit
June 9, 1998	82 and absolute value circuit 117;
5,867,574	discloses (FIG. 2) a method for detecting voice
Eryilmaz	activity employing a plurality of calculations;
February 2, 1999	
6,138,040	discloses (FIG. 3) a method for detecting voice
Nicholls et al.	by comparing signal energy to calculated
October 24, 2000	average background noise;
6,212,273	discloses (FIG. 3) processing signal S_{in} from a
April 3, 2001	microphone input and comparing the results
Hemkumar et al.	with a plurality of thresholds;
6,282,176	discloses (FIG. 3) processing signal S_{in} from a
August 28, 2001	microphone input and comparing the results
Hemkumar	with a plurality of thresholds;

It is respectfully submitted that the invention as disclosed and claimed in the above-identified application is not disclosed or suggested by the prior art listed above.

Respectfully submitted,



Paul F. Wille

Reg. No. 25,274

Attorney for Applicant

6407 East Clinton Street
Scottsdale, AZ 85254
tel. (602) 549-9088
fax (480) 778-0304

J1040 U.S. PRO
 10/056826


INFORMATION DISCLOSURE CITATION	Attorney Docket No. 10205.031	Group
	Domer	Serial No.
		Filing Date January 25, 2002

U.S. PATENT DOCUMENTS

Init.	Document Number	Date	Name	Class	Sub-class	Filing Date
	3875339	04-75	Gruen et al.	179	15FD	
	4610023	09-86	Noso et al.	381	43	
	4720862	01-88	Nakata et al.	381	38	
	4796287	01-89	Reesor et al.	379	390	
	4879745	11-89	Arbel	379	389	
	5323337	06-94	Wilson et al.	364	574	
	5418848	05-95	Armbrüster	379	406	
	5598466	01-97	Graumann	379	389	
	5692042	11-97	Sacca	379	387	
	5764753	06-98	McCaslin et al.	379	389	
	5867574	02-99	Eryilmaz	379	389	
	6138040	10-00	Nicholls et al.	455	569	
	6212273	04-01	Hemkumar et al.	379	410	
	6282176	08-01	Hemkumar	370	276	03-98

FOREIGN PATENT DOCUMENTS

Document Number	Date	Name	Class	Sub-class	Translation

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.